

**REMARKS**

**Status of the Application**

Claims 1, 3, and 6-25 are pending in the application. Claims 12-25 have been withdrawn from consideration. Claims 1, 3, and 6-11 have been examined.

**Formal Matters**

Applicant thanks the Examiner for considering the references submitted with the Information Disclosure Statement filed on April 28, 2008.

**Claim Rejections**

***Claims 1, 3, and 6-11 --- 35 U.S.C. § 103(a)***

Claims 1, 3, and 6-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,310,844 to Keshner *et al.* ("Keshner") in view of U.S. Patent No. 7,132,200 to Ueda *et al.* ("Ueda") and U.S. Patent No. 5,777,760 to Hays *et al.* ("Hays"). Applicant traverses this rejection.

Addressing claim 1, the combination of Keshner, Ueda, and Hays does not disclose or suggest at least "a holographic recording layer ... and a two-dimensional recording layer being a phase-change film, a pigmented coat, or a magneto-optical recording film that is laminated in a film thickness direction of the holographic recording layer, ... [and] wherein the two-dimensional recording layer senses a second light beam so that a mark is recorded on the two-dimensional recording layer according to change of the physical property of the two-dimensional recording layer," as recited in amended claim 1. The Examiner concedes that Keshner does not disclose or suggest these features and relies on Ueda to allegedly disclose the claimed recording layers. Applicant respectfully submits that Ueda does not provide the alleged disclosure.

In the presently claimed embodiments, hologram information can be recorded or reproduced as an interference pattern only of the first light beam FB passing through the *holographic recording layer 7*. The servo beam SB used for mark recording is focused on the *two-dimensional recording layer 5*. The two-dimensional recording layer 5 is a phase-change film, a pigmented coat, or a magneto-optical recording film where sensitivity to a wavelength of the servo beam SB is set to be higher than that to a wavelength of the first beam FB. The optical interference pattern is produced by the first light beam FB so that *a hologram is recorded only in the hologram recording layer 7*, while independently *the two-dimensional recording layer 5 senses only the servo beam SB so that a mark is recorded on the two-dimensional recording layer 5* according to change of a physical property of the two-dimensional recording layer 5. Different recording and reproducing principles are used in the hologram recording layer 7 and the two-dimensional recording layer 5.

Ueda, on the other hand as illustrated in FIGS. 12 and 13, discloses a hologram recording sheet comprising a holographic green sensitive material layer 52 and a holographic red sensitive material layer 53, each storing individually an optical interference pattern comprising components of coherent reference light and signal light as a diffractive grating therein. The same recording and reproducing principle is used in the holographic green and red sensitive material layer 52 and 53, respectively. Thus, Ueda does not disclose any two dimensional recording layer made of a phase-change film, a pigmented coat, or a magneto-optical recording film which uses a recording and reproducing principle different from that of a holographic recording layer made of photo-refractive material, hall burning material, photo-chromic material, or the like.

Further, Ueda is simply related as a hologram recording sheet suitable for multicolor displays, and suggests a holographic optical element such as a multicolor heads-up display

combiner, a multicolor display hologram, a heat-wave reflecting film used on windows, a broad band holographic filter, etc. Therefore, Ueda does not disclose or suggest any two-dimensional recording layer that is a phase-change film, a pigment film, or a magneto-optical recording film whose physical property changes in response to light irradiated. Hays does not cure the deficiencies of the Keshner-Ueda combination.

The Examiner relies on Hays to allegedly disclose that the mark recorded in a two-dimensional recording layer includes servo control information. Hays, however, fails to disclose or suggest at least the above-noted features of claim 1 which are deficient in the Keshner-Ueda combination. Therefore, the combined references fail to disclose or suggest all of the features of amended claim 1.

Accordingly, since the combination of Keshner, Ueda, and Hays does not disclose or suggest all of the claimed features, amended claim 1 is patentable over the combined references. Claims 3 and 6-11 are patentable at least by virtue of their dependence from claim 1.

### **Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111  
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Francis G. Plati, Sr.", written over a horizontal line.

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